

FIELD MODIFICATION APPROVAL FORM
LFM-OU3-02
Libby OU3 Phase II Sampling & Analysis Plan

Requested by: Lynn Woodbury Date: 6-19-2008

Description of Deviation:

Stopping Rule Modification –

The TEM stopping rules for water analyses as presented in Section 6.1.1 of the Phase IIA Sampling and Analysis Plan (Rev1) will be modified based on laboratory input to allow for faster analysis completion. In brief, the maximum LA structures stopping rule is reduced from 50 structures to 25 structures.

Stopping rules are modified as follows:

1. Calculate the number of GOs needed to achieve the target sensitivity.
2. If the target sensitivity can be achieved by counting 50 or fewer GOs, count until the target sensitivity is achieved, or until 25 LA structures are observed. If 25 LA structures are observed, finish counting the GO containing the 25th structure, then stop.
3. If the target sensitivity requires more than 50 GOs, count until 50 GOs are counted, or until 25 LA structures are observed. If 25 LA structures are observed, finish counting the GO containing the 25th structure, then stop.

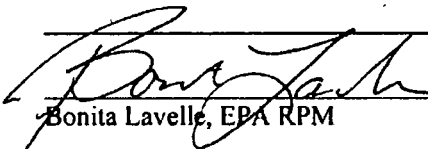
Clarification of Water Sample Preparation Methods –

For each water sample that will be analyzed by TEM, prepare three filters by applying volumes of 100 mL, 50 mL, and 25 mL. Select the filter from the dilution series yielding the largest possible application volume which does not violate the criteria for an overloaded sample (> 20 structures per GO). If TEM examination of the 25 mL aliquot is deemed overloaded, the laboratory may proceed to prepare a 10 ml aliquot dilution. Based on preliminary observation of the 10 ml filter, if it appears that this filter remains overloaded, take 10 ml of the remaining volume and dilute to 100 ml. From this secondary dilution, prepare a second series of filters using 50 ml, 25 ml, and 10 ml (corresponding to 5 ml, 2.5 ml, and 1 ml of the original suspension).

☒ EPA Region 8 has reviewed this field modification and approves as proposed.

☐ EPA Region 8 has reviewed this field modification and approves with the following exceptions:

☐ EPA Region 8 has reviewed this field modification and does not agree with the proposed approach for the following reasons:


Bonita Lavelle, EPA RPM

6/19/08
Date